For much of the historical material I owe thanks to Joseph Ewan, who interested himself in the problem, and entertained me in a significant way in his library at the Missouri Botanical Garden.

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WHAT IS *ARISTIDA PERUVIANA*?—John R. Reeder, Herbarium, University of Arizona, Tucson, AZ 85721.

In 1975, A. A. Beetle (Phytologia 30:348) described, as a new species, *Aristida peruviana,* citing as the type *Mexia 4172* from Dept. Arequipa, Province Islay, Peru (UC). [The correct Mexia number is 4173, and this is acknowledged in a letter from Beetle attached to the holotype sheet.] He indicated that the nearest relative of his new species appeared to be *A. peninsularis* Hitchc., a taxon which has been treated as a synonym of *A. californica* var. *californica* by Gould & Moran (Memoirs of the San Diego Society of Natural History 12:99, 100, 1981), and also by Reeder & Felger (Madroño 36:189, 1989). *A. californica* is a member of section *Arthratherum,* characterized by having the apex of the lemma articulated with a distinct, twisted awn column. The awns and column separate from the lemma body at maturity.

In his original description, Beetle makes no mention of an awn column. There is, moreover, no discussion concerning how the new species differs from its presumed closest relative, but the following key is provided:

First glume 10 mm long, second glume 20 mm long, awns 4 to 5 cm long
A. peninsularis Hitchc.

First glume 5–6 mm long, second glume 10 mm long, awns 1.5 to 3 cm long
A. peruviana Beetle.

Recently Dra. Hilda Longi-Wagner sent me a specimen of *Aristida,* clearly a member of section *Arthratherum,* which had been collected in Peru. She remarked that this collection was especially interesting, since it apparently represented the first South American record of an *Aristida* belonging to that section. This was somewhat of a surprise because I was aware of *A. peruviana* Beetle. Although I had not seen the type, I assumed it was a member of section *Arthratherum* because the author had indicated that it was a close relative of *A. peninsularis.*

Hoping to clarify the problem outlined above, I requested from the University of California, Berkeley, the loan of Beetle's type, along with any other specimens he had annotated as *Aristida peruviana.* When the loan arrived, it included the holotype (*Mexia 4173*), along with three other collections (*Anderson 733, Hutchinson 502, and Weberbauer 6867*). The latter three had been cited by Beetle in his original description, and are therefore paratypes. It is of interest that all of the above specimens, including the holotype, had been named *A. adscensionis* prior to the time that Beetle annotated them as his new species, *A. peruviana.*

Examination of these specimens revealed that all of them, indeed, do represent *Aristida adscensionis* L. All are readily recognized as members of that species, although there is some variation among them, as is to be expected with samples of this variable taxon. The Mexia specimen had been determined by Ivan Johnston; Oscar Tovar had annotated the Hutchinson collection. There is no indication of who first had named the Anderson specimen. Regarding the Weberbauer sheet, it was named originally "*Aristida adscensionis* L. fa. *typica,*" perhaps by Weberbauer himself. Moreover, this same specimen was cited as *A. adscensionis* by Hitchcock (Contributions of the U.S. National Herbarium 24:404, 1927), and also, as noted by Beetle, under that same name by McBride (Publications of the Field Museum of Natural History, Botany Series 13:183, 1936).

It is difficult to understand how Beetle could have considered quite ordinary specimens of *Aristida adscensionis* (section *Aristida,* and type species of the genus and section) to represent an undescribed species of section *Arthratherum.* None of the specimens which Beetle cited has any suggestion of an awn column or articulation at the apex of the lemma, definitive characteristics for this latter section.

Included with the material received on loan from UC were a number of sheets of unnamed *Aristida* from South America. An interesting sidelight is that among them was another Anderson specimen from Peru, his no. *970.* The data are: "Peru: Lambayeque—30 kil. south of Chiclayo; 80 m. elev. Arid desert seldom seen with any vegetation. Single plants covering large area. 10 cm high. This is the southern limit of this grass. 2 May 1949." On a slip within a packet pasted to the specimen sheet is written in pencil "new species." As it turns out, the specimen represents *Aristida chiclayense* Tovar, and was cited by the author as a paratype (Publicaciones del Museo de Historia Natural "Javier Prado." Serie B. Botánica 32:11, 12, 1984).

Curiously, although *Aristida chiclayense* is clearly a member of section *Arthratherum,* Tovar does not mention this. Nevertheless, his description "columna de las aristas de 4.5–6 mm de largo" and his figure suggest strongly this alliance. The holotype of *A. chiclayense,* which was kindly lent by US, is a close match for *Anderson 970,* and was collected in about the same locality and on the same date.

Finally, it is ironical that the two Anderson specimens referred to above have the consecutive UC herbarium accession numbers M154595 and M154596. This suggests that they were put into the herbarium at the same time, and both should have been available to Beetle at the time he studied material which resulted in his description of *Aristida peruviana.* He cites *Anderson 733* (UC-M154595) as a paratype, but does not mention *Anderson 970* (UC-M154596). As indicated above, *733* (along with the holotype and other paratypes cited by Beetle) is actually *A. adscensionis* (section *Aristida*), whereas *970* is a member of section *Arthratherum* (a relative of *A. peninsularis* = *A. californica*). Had Beetle used *Anderson 970* as the type of his *A. peruviana* in 1975, that name would be the legitimate one for the species described nine years later by Tovar as *A. chiclayense.* An opportunity was missed, and the publication of *Aristida peruviana* Beetle, rather than being the legitimate name of a valid species, only adds one more synonym to the long list of those of *A. adscensionis* L.

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